

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (withdrawn) A carbonaceous complex structure comprising a layered set of a substrate, a carbonaceous thin film and a fullerene thin film.
2. (withdrawn) The carbonaceous complex structure according to claim 1 wherein said carbonaceous thin film and the fullerene thin film are layered in this order on a smooth surface of said substrate.
3. (withdrawn) The carbonaceous complex structure according to claim 2 wherein said smooth surface of said substrate has a roughness Ra of not larger than 1  $\mu\text{m}$ .
4. (withdrawn) The carbonaceous complex structure according to claim 1 wherein a first electrode, said carbonaceous thin film, said fullerene thin film and a second electrode are layered in this order on said substrate.
5. (withdrawn) The carbonaceous complex structure according to claim 4 wherein said substrate and the first electrode are transparent.
6. (withdrawn) The carbonaceous complex structure according to claim 1 wherein said carbonaceous thin film and a pair of electrodes are layered in this order on said substrate and wherein said fullerene polymer film is formed at least between said electrodes.
7. (withdrawn) The carbonaceous complex structure according to claim 1 wherein said carbonaceous thin film is formed by thermal decomposition of an organic compound.

8. (withdrawn) The carbonaceous complex structure according to claim 1 wherein said fullerene thin film is a fullerene polymer film or a fullerene vapor-deposited film.

9. (withdrawn) The carbonaceous complex structure according to claim 8 wherein said fullerene polymer film is a film polymerized on illumination of electromagnetic waves.

10. (withdrawn) The carbonaceous complex structure according to claim 9 wherein said fullerene polymer film is a polymerized film of said vapor-deposited film formed to a pre-set thickness.

11. (withdrawn) The carbonaceous complex structure according to claim 9 wherein said fullerene molecules are C<sub>60</sub> or C<sub>70</sub> or a mixture thereof and wherein said electromagnetic waves are RF plasma, UV rays or an electron beam.

12. (currently amended) A method for manufacturing a carbonaceous complex structure comprising the steps of:  
~~a step of~~ forming a carbonaceous thin film on a smooth surface of a substrate; and  
~~a step of~~ forming a fullerene polymer film on said ~~thus-formed~~ carbonaceous thin film.

13. (cancelled)

14. (currently amended) The method for manufacturing a carbonaceous complex structure according to claim 13 wherein the roughness Ra of said smooth surface of said substrate is ~~set to~~ not larger than 1  $\mu$ m.

15. (cancelled)

16. (cancelled)

17. (currently amended) The method for manufacturing a carbonaceous complex structure according to claim 12 further comprising the step of:  
layering a pair of spaced apart electrodes on said carbonaceous thin film ~~such that~~  
wherein said fullerene polymer film is at least partially formed at least in the space between said  
electrodes.

18. (cancelled)

19. (cancelled)

20. (currently amended) The method for manufacturing a carbonaceous complex structure according to claim ~~19~~ 12 wherein ~~the fullerene polymerization method is~~ said fullerene polymer film is formed by a method selected from the group consisting of a plasma polymerization method, a micro-wave polymerization method, an electrolytic polymerization method, an electron beam polymerization method, an X-ray polymerization method ~~or~~ a photopolymerization method, and combinations thereof.

21. (currently amended) The method for manufacturing a carbonaceous complex structure according to claim 12 wherein:  
said fullerene polymer film is formed by vapor deposition of at least one fullerene molecules ~~to form thereby forming~~ a vapor-deposited film and then illuminating said film ~~of fullerene molecules by with~~ electromagnetic waves to ~~polymerize thereby polymerizing~~ said fullerene ~~molecules~~ molecule.

22. (cancelled)

23. (cancelled)

24. (currently amended) The method for manufacturing a carbonaceous complex structure according to claim 21 wherein said fullerene ~~molecules are~~ molecule is selected from the group consisting of C<sub>60</sub>, or C<sub>70</sub>, and or a mixtures thereof and wherein said

electromagnetic waves are selected from the group consisting of RF plasma, UV rays, or an electron beam, and mixtures thereof.

25. (allowed) A method for manufacturing a carbonaceous complex structure comprising:  
a step of forming a first electrode having a surface with a roughness Ra set to not larger than 1  $\mu\text{m}$  on a substrate;  
a step of forming a carbonaceous thin film on the surface of the first electrode;  
a step of forming a fullerene polymer film on said thus formed carbonaceous thin film; and  
a step of forming a second electrode on said thus formed fullerene polymer film.

26. (allowed) The method for manufacturing a carbonaceous complex structure according to claim 25 wherein said substrate and the first electrode are transparent.

27. (previously presented) The method for manufacturing a carbonaceous complex structure according to claim 12 wherein said carbonaceous thin film is formed by thermal decomposition of an organic compound.